

# MEASLES UPDATE

## National Immunization Program (NIP), Centers for Disease Control & Prevention Measles Activity in U.S. through Week 48 (ending Dec 4, 2004)

**No. of confirmed measles cases reported to MMWR by Week 48, 2004: 28**  
**No. of confirmed measles cases reported to NIP by Week 48, 2004: 37**  
**No. of confirmed measles cases reported for same period in 2003: 52**  
**Total No. of U.S. outbreaks (3 or more linked cases) in 2004: 2**

As of reporting week 48 (ending Dec 4, 2004), 28 cases of measles had been reported to MMWR compared to 37 cases reported to the National Immunization Program (NIP). Cases are listed by rash onset date in the table below. NIP is aware of 37 confirmed cases in 13 states from: WA - 7; CA - 6; IA - 3; NYS - 1; NYC - 5; MD - 1; NJ - 3; HI - 2; MO - 2, MA - 2, GA - 1; NC - 2, CO-1, FL - 1. Thirty-one of 37 (84%) of the cases are import-associated (includes 26 imports and 5 traceable to import). Source countries for the 26 imports are: China (11 imports), Bangladesh (2), India (4), Saudi Arabia (1), Philippines (1), & Japan (1), Malaysia (1), Nigeria (1), Russia (1); Hong Kong (1), England (1), Thailand (1). As for the 5 cases traceable to imports: 1 case is traceable to import from China, 3 cases are traceable to import from India; and 1 case traceable to import from England.

### Recent calls:

**New York City** – One case from the Bronx was reported as IgM positive for measles during Week 47. The case is a 3-year-old Hispanic male with rash onset 11/21/04, fever onset 11/22/04. The physician reported seeing Koplick's spots, no cough, coryza or conjunctivitis. Child has documented history of 1 MMR after 1st birthday. Results from blood collected on 11/23/04 sent to the NYC DOH lab were positive for measles IgM at 24.8 (positive if >6.5), and measles IgG at 2.38; rubella IgM negative and IgG positive. Results were indeterminant by CDC. Viral specimen is being processed at CDC and a convalescent specimen will be forwarded so paired sera can be run.

**Florida - Hillsborough County** reported an IgM-positive case in Week 47 in a 1-year old child returning to Florida from India on 11/14-15 (Hyderabad to Bombay; Bombay to Newark; Newark to Tampa). The unimmunized 1-year-old had symptoms on 11/16/04, rash onset 11/18/04. The family had been in India since June. Source of infection was a cousin in India with diagnosed measles. The flight information for this case was posted on Epi-X (12/1/04). No other cases have been identified to date.

Note: Please go to last page for summary of Rubella and Mumps activity in U.S. reported through Week 48.

**U.S. MEASLES cases (N=37) reported by rash onset date:**  
**CASES IN BOLD ARE RECORDS SENT SINCE LAST MEASLES UPDATE**

#	Proj	Age /dob	Rash onset Date	Vacc	Spread Cases?	Reported To MMWR?	Viral Specimens Received at CDC	MEASLES as of Dec 10, 2004 Comments / Source Information
01 imp	HI	4-yr-old female	12/31/03	No	No	Yes, For 2004	No	Single <b>IMPORT</b> , Japanese visitor arrived 12/28/03. Case record will remain in 2004 dataset.
<b>02 unk</b>	<b>NJ</b>	<b>55 yr old male</b>	<b>1/27/04</b>			<b>Yes</b>		<b>Bergen County record rec'd via NETSS — Not sure if this is a valid entry. NJ is checking with the county.</b>
03 imp	CA	14-yr-old male	2/10/04	Unk	Unk, possibly a 7 - mo old (case 05)	Yes, In Wk 48	No	IMPORT, born in Egypt, travel from Saudi Arabia; This patient treated at San Francisco <u>neighborhood</u> clinic 2/12-13. See 7-mo-old below #05 (was in same clinic another day). No direct linkage could be found.
04 imp	CA	9-mo-old female	2/22/04	No (too young)	No	No	Yes, D3	Single IMPORT/Philippines; U.S. military dependent returning to L.A. on 2/22 (day of rash) after baby & family visited family t in the Philippines. US born, hospitalized. Passengers were notified. No spread cases were identified. FLIGHT # PR12 from Manila to LAX 2/22/04.

#	Proj	Age /dob	Rash onset Date	Vacc	Spread Cases?	Reported To MMWR?	Viral Specimens Received at CDC	MEASLES as of Dec 10, 2004 Comments / Source Information
05 unk	CA	7 mo-old female	2/27/04	No, (too young)	Yes, 1 (case 08)	Yes, In Wk 48	No	San Francisco, possible cluster but no link. Same neighborhood as import from Egypt. No lab, conf by epi-linked to spread case (23 yr old mother) below—case 08
06 imp	NYC	13 mo old male, Bronx	2/28/04	No	No	Yes	No	Single IMPORT/U.S. resident from Bangladesh Returning 2/18/04 following 3.5 mo stay. A total of 146 contacts were identified.
07 imp	NYC	9-mo-old female, Brooklyn	3/3/04	No	No	Yes	Yes, np D8	Single IMPORT/U.S. resident from Bangladesh Hospitalized in Brooklyn, IgM+ Baby & family had been in Bangladesh for 3 months, returning 2/17. Hospitalized 3 wks for diarrhea while in Bangladesh for 3 weeks prior to return to U.S. A total of 93 contacts were identified.
08 unk	CA	23 year old female	3/6/04	Unk	No	Yes, In Wk 48	No	San Francisco 2-case chain. This patient was hospitalized (IgM+) and is the mother to the 7 mo old above—case 04.
09 imp	HI	23-year-old male	3/9/04	Unk	Unk	Yes, Wk 11	No	IMPORT - U.S. resident returned from India on 3/9/04.
10 unk	NJ	1-year-old female	3/10/04	No	Unk	Yes	No	Middlesex County, IgM+ No travel.
11 unk	NYC	12-mo-old female Bronx	3/10/04	Yes, 3/1/04	No	Yes	No	Unknown source of exposure; Vaccination date in NETSS is 3/1/04
12 imp	IA	19-year-old male	3/13/04	No	Yes, 2 cases	Yes	Yes, D8	IMPORT, New Delhi. Linn & Johnson Counties, Iowa Outbreak. US resident traveled with student group to New Delhi, India. This case-student as well as 2-3 others in the student group were non medical exemptions. He is epi-linked to these other cases (fellow students sick in INida). He is the source to 2 US cases below (his unimmunized sister and a passenger seated next to him on the flight. MMWR Dispatch was published. NW flight 039 from Amsterdam to Detroit and NW 3786 from Detroit to Cedar Rapids, on 3/12/04.
13 trac	IA	16-year-old female	3/22/04	No	No	Yes	Yes, D8	TRACEABLE to import. Linn & Johnson Counties, Iowa Outbreak. Source is her brother-#10 -import from India. She received vaccine on 3/13 as result of exposure to infectious brother when he arrived in Iowa on 3/12. She had been previously unimmunized with a non medical exemption.
14 trac	IA	21 year old male	3/24/04	Yes, 2 MMRs	No	Yes	Yes, D8	TRACEABLE to import. Linn & Johnson Counties, Iowa Outbreak. This is a vaccinated college student who sat next to the 19-year-old import above #10 on the plane from Detroit to Cedar Rapids on 3/12. This spread case is resident of Iowa City (Johnson County), He was IgM+ and met case definition. Hx of 2 doses (@15 mos & 15 years of age)
15 imp	WA Twin	14 mos	3/22/04	No	Yes	No		IMPORT, Outbreak among Adoptees/China King County
16 imp	WA Twin	14 mos	3/23/04	No		No		IMPORT, Outbreak, Adoptee/China King County
17 imp	WA	12 mos female	3/30/04	No		No		IMPORT, Outbreak, Adoptee/ China King County
18 imp	MD	12 mos female	3/31/04	No		Yes	Yes, Unsuccessful	IMPORT, Outbreak, Adoptee/ China
19 imp	WA	12 mos female	4/3/04	No		No		IMPORT, Outbreak, Adoptee/China King County

#	Proj	Age /dob	Rash onset Date	Vacc	Spread Cases?	Reported To MMWR?	Viral Specimens Received at CDC	MEASLES as of Dec 10, 2004 Comments / Source Information
20 imp	WA	18 mos female	4/3/04	No		No		IMPORT, Outbreak, Adoptee /China King County
21 imp	WA	13 mos female	4/3/04	No		No		Outbreak, Adoptee / China Snohomish County
22 imp	WA	12 mos female	4/6/04	No		No		Outbreak, Adoptee/ China King County
23 imp	NYS	13 mos female	4/10/04	No		Yes	Yes, H1	Outbreak, Adoptee/ China Ulster County
24 trac	CA	19-old-female	4/18/04	No, (PBE)	No	No	Yes, H1	Outbreak, Adoptee/China Santa Cruz County, CA. US resident. Only spread case from the adoptee outbreak Student was given ½ dose IG on 4/6 after exposure to infectious adoptee (4/2-4). Student was then quarantined. No further cases.
--	UT	30-year-old to be deleted	5/5/04			Yes-but Should be deleted		Cache county; NIP verified with state this is to be deleted. Result of IgM testing on nursing school student. <b>Not a case, will be deleted per Utah.</b>
25 imp	CO	39-year-old	5/6/04	Yes, 2	No	Yes		U.S. resident, IMPORT from Malaysia History of 2 doses after 1 <sup>st</sup> birthday
26 imp	MA	14-mo-old	6/2/04		Yes, 1	Yes	Yes, D8	Norfolk County resident returned from trip to India on 5/31/04. She is source of infection to 14 month old case in day-care.
27 imp	CA	26-yr-old male	6/4/04			Yes, In Wk 48	No	IMPORT, Thailand US born in Los Angeles hospitalized. IgM+
28 imp	MO	14-mo-old female	6/10/04			Yes	No	IMPORT, Chinese Adoptee
29 imp	NC	11-yr-old	6/13/04	No, PBE	Yes, 1	No		IMPORT, England U.S. resident infected baby below at swim party
30 trac	NC	11-mo-old	6/20/04	No, Too Young	No	No		Traceable to import, England import above (secondary case exposed 4H campers from multiple states)
31 trac	MA	14-mo-old	6/20/04	No	No	Yes	Yes, D8	TRACEABLE to import, INDIA
32 imp	MO	34-yr-old female	6/24/04			Yes but Needs to Be coded As import	Yes, H1	IMPORT, mother to above adoptee
33 imp	GA	Adult female	7/12/04			No	No	IMPORT, visitor from Russia
34 imp	NJ	9 mo old	7/12/04	No		Yes		Essex County; import from Nigeria
35 imp	NYC	2-yr-old female	7/31/04			Yes		IMPORT, China U.S. resident returning from Thailand/China. Arrived NYC 7/30 with rash onset en route to Florida. Had been hospitalized with diarrheal illness while in China 7/16.
--	IL	2 error records	8/5 & 8/16			Yes, To be Deleted		2 records in NETSS will be deleted by Illinois.
--	HI	2 error records	8/6/04 8/6/04			Yes, To be Deleted		2 records in NETSS will be deleted by Hawaii.
36 imp	FL	1 year old female	11/18/04	No		No		Import from India Epi-X posted for flights involved Arrived 11/14-15; been in India since June
37 unk	NYC	3 year old Bronx	11/21/04	Yes, 1		No	Yes	Final serological results still pending. Viral specimen is being processed and convalescent was obtained and will be sent to CDC. For now this case is listed as confirmed based on IgM+ in NYC lab.

2004 Measles Outbreaks (3 or more linked cases)						Shaded= IMPORTED source
	Proj	Location(s)	1 <sup>st</sup> & Last Rash Onsets	# Conf Cases	Ages (or range)	Comments
1	IOWA	Linn County/ Johnson County	March 13- March 24, 2004	3	19 years 16 years 21 years	Source is India Index is 19 year old unvaccinated US resident with non-medical exemption. He was returning from New Delhi on 3/12. Two spread cases are a passenger seated beside him on plane and his 16-yr-old Sister (both Iowa residents). Genotype = D8
2	Multi-state	Washington (7) Maryland (1) NY State (1) California (1)	March 22 – April 18, 2004	10	12 months to 19 years	Source is China; outbreak among group of adoptees arriving in U.S. on March 26 + 1 spread to unimmunized 19 year old resident from California. Genotype = H1

#### **Week 48 – Rubella, CRS & Mumps in the U.S.**

**Dec 10, 2004**

**Rubella** - No new cases were reported to MMWR for Week 48. The current rubella total in MMWR is 11 cases, compared to 7 cases for the same period last year. NIP is aware of 10 confirmed rubella cases for 2004 from: Alaska (1 out-of-state import from Florida); Georgia (1 import from Bangladesh); Missouri (1 unknown source); Maryland (1 import from Senegal); New Jersey (1 indigenous case but had exposure to sick relative from Saudi Arabia; and 1 unknown source we have no details on); NYC (1 unk source born in USA); Texas (1 unknown source case born in Mexico), Utah (1 import from India, 1 unknown source case born in USA-- transplant patient). Utah has one other record in NETSS they plan to delete. Of the 10 cases of rubella this year, 4 were foreign born.

Pending from last week: In Week 47, Georgia had reported a suspicious rash illness in a child who arrived from Romania on 11/11. Her rash onset was 11/14, no other symptoms. Rubella results from GPHLab were IgM equivocal and IgG negative. CDC retested these specimens with same results. A convalescent specimen is being sent for paired sera testing.

**CRS** - No cases of congenital rubella syndrome were reported to MMWR as of Week 48. The total for CRS for 2004 remains 0 cases reported compared with 0 cases for same period of 2003. There was one CRS case reported in 2003 during Week 52.

**MUMPS**- Fourteen new mumps cases were reported to MMWR during Week 48. The current case total for mumps reported to MMWR is 209 cases compared with 201 cases for the same period of 2003. Thirty-five grantees have reported mumps this year. Those reporting more than 5 cases are: CA - 51 cases, TX - 16, NYC - 13; IL - 10, OH - 10, PA - 11, HI - 7, NJ -9, FL - 6, & LA - 6. Eighty-eight (42%) of cases are <15 years of age. For the 156 (75% of cases) where case status is known, 116 (74%) are confirmed and 40 (26%) are probable. Of the 116 cases reported as confirmed; 55% (64) were laboratory confirmed. Of the 136 cases (65%) with known importation status, 123 were indigenous and 13 were imported. Of the 139 cases with known race; 105 (76%) are Caucasian, 19 (14%) are Asian/Pacific Islander, 9 (6%) are African-American, 2 (1%) are Native American/Alaskan Native, and 4 (3%) were other. Of the 121 cases with known ethnicity, 32 (26%) are Hispanic.